

Guideline Regarding Hormonal Treatment of Minors with Gender Dysphoria at Tema Barn - Astrid Lindgren Children's Hospital (ALB).

Background

The hormonal treatment of children and adolescents with gender dysphoria may consist of puberty-blocking treatment which may be initiated at the onset of puberty, and cross-sex hormones which may be initiated at the age of 16. These treatments are controversial and have recently become subject to increased attention and scrutiny both nationally and internationally.

In December 2019, the SBU (*Swedish Agency for Health Technology Assessment and Assessment of Social Services*) published an overview of the knowledge base which showed a lack of evidence for both the long-term consequences of the treatments, and the reasons for the large influx of patients in recent years. In October 2020, NICE (*The National Institute for Health and Care Excellence, UK*) also performed an evidence review of GnRHa (*puberty blocker*) and of cross-sex hormone treatments of children and adolescents with gender dysphoria. Taken together, they show that the studies conducted to date are small, uncontrolled observational studies providing low quality evidence that the treatments have the desired effect, and that we have very little knowledge about their safety in the long term.

A highly publicized court case from Great Britain has shed light on this issue and in a judgment from December 1st, 2020 the court establishes the overarching problem of puberty-blocking treatment and that informed consent for this treatment is highly doubtful, if at all possible, under 16 years of age. For ages between 16 and 18, the court considers it advisable to request a court approval before starting hormonal treatment, since the treatment should be regarded as experimental. As a result of this ruling, the NHS (*National Health Service*) discontinued initiating hormonal treatments in new cases of individuals under 16, while recommending a thorough review of ongoing actively treated cases. For patients between ages 16 and 18, it is recommended that the treating physician receives court approval before cross-sex hormones are initiated. During the Spring of 2020 the NHS changed its public stance regarding puberty blocking treatment, from considering it fully reversible, to now describing it as having uncertain long-term consequences. Following the above-mentioned ruling, the NHS changed their guidelines to no longer initiate hormonal treatment of gender dysphoria in patients under 16 years of age.

These treatments are potentially fraught with extensive and irreversible adverse consequences such as cardiovascular disease, osteoporosis, infertility, increased cancer risk, and thrombosis. This makes it challenging to assess the risk / benefit for the individual patient, and even more challenging for the minors or their guardians to be in a position of an informed stance regarding these treatments.

- In light of the above, and based on the precautionary principle, which should always be applied, the ALB will not initiate hormonal treatment (*i.e., puberty blocking and cross-sex hormones, see above*) for patients with gender dysphoria.
- Hormonal treatment will only be allowed to take place in a clinical trial setting that received ethical approval by the EPM (*Ethical Review Agency/Swedish Institutional Review Board*). The patient must receive comprehensive information about potential risks of the treatment, and a careful assessment of the patient's maturity level must be conducted to determine if the patient is capable of taking an informed stance on, and consenting to, the treatment.
- These changes are effective as of May 1, 2021.

For patients currently treated with puberty blockade or cross-sex hormones, a careful individual assessment to determine whether treatment should be stopped or continued must be performed by the physician responsible for the patient. In such an assessment, it is important to present adequate information about the uncertainty in the state of evidence regarding long-term effects and potential risks of the treatment, in order to make it possible for patients and guardians to make an assessment, and an as well-informed decision as possible, about consenting to a potential continued treatment. The young patients' degree of maturity in their ability to consent, and remaining indication should factor into this decision.

Signed by:

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References:

SBU (Swedish Agency for Health Technology Assessment and Assessment of Social Services). "[Könsdysfori hos barn och unga - En kunskapskartläggning" rapport 307](#). ("[Gender Dysphoria in Children and Adolescents - An overview of the literature" report 307](#).) Record Number: SBU 2019/427

Judgement in the Great Britain court case:

<https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

NHS change in procedure after the ruling:

<https://www.england.nhs.uk/wp-content/uploads/2020/12/Amendment-to-Gender-Identity-Development-Service-Specification-for-Children-and-Adolescents.pdf>

NICE reports:

Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria

<https://arms.nice.org.uk/resources/hub/1070905/attachment>

Evidence review: Gender-affirming hormones for children and adolescents with gender dysphoria

<https://arms.nice.org.uk/resources/hub/1070871/attachment>

Selection of articles where potential risks of the treatment are described:

Hembree WC, Cohen-Kettenis PT, Gooren L, Hannema SE, Meyer WJ, Murad MH, Rosenthal SM, Safer JD, Tangpricha V, T'Sjoen GO. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab*. 2017 Nov 1; 102(11):3869-3903. doi: 10.1210/jc.2017-01658.

Nota NM, Wiepjes CM, de Blok CJM, Gooren LJG, Kreukels BPC, den Heijer M. Occurrence of Acute Cardiovascular Events in Transgender Individuals Receiving Hormone Therapy. *Circulation*. 2019 Mar 12;139(11):1461-1462. doi: 10.1161/CIRCULATIONAHA.118.038584. PMID: 30776252.

Meyer G, Boczek U, Bojunga J. Hormonal Gender Reassignment Treatment for Gender Dysphoria. *Dtsch Arztebl Int*. 2020 Oct 23; 117(43):725-732. doi: 10.3238/arztebl.2020.0725. PMID: 33559593; PMCID: PMC7871443.

Mayhew AC, Gomez-Lobo V. Fertility Options for the Transgender and Gender Nonbinary Patient. *J Clin Endocrinol Metab*. 2020 Oct 1;105(10):3335-45. doi: 10.1210/clinem/dgaa529. PMID: 32797184; PMCID: PMC7455280.

Cheng PJ, Pastuszak AW, Myers JB, Goodwin IA, Hotaling JM. Fertility concerns of the transgender patient. *Transl Androl Urol*. 2019 Jun;8(3):209-218. doi: 10.21037/tau.2019.05.09. PMID: 31380227; PMCID: PMC6626312.

Nota NM, Wiepjes CM, de Blok CJM, Gooren LJG, Peerdeman SM, Kreukels BPC, den Heijer M. The occurrence of benign brain tumours in trans gender individuals during cross-sex hormone treatment. *Brain*. 2018 Jul 1;141(7):2047-2054. doi: 10.1093/brain/awy108. PMID: 29688280.

Stevenson MO, Tangpricha V. Osteoporosis and Bone Health in Transgender Persons. *Endocrinol Metab Clin North Am*. 2019 Jun;48(2):421-427. doi: 10.1016/j.ecl.2019.02.006. Epub 2019 Mar 23. PMID: 31027549; PMCID: PMC6487870.